



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/594,563

06/01/2007

Takashi Hotta

77661/73

4705

23838 7590 12/22/2008

KENYON & KENYON LLP  
1500 K STREET N.W.  
SUITE 700  
WASHINGTON, DC 20005

EXAMINER

LUKS, JEREMY AUSTIN

ART UNIT

PAPER NUMBER

2837

MAIL DATE

DELIVERY MODE

12/22/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/594,563	<b>Applicant(s)</b> HOTTA ET AL.	
	<b>Examiner</b> JEREMY LUKS	<b>Art Unit</b> 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 3-6 and 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 7-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/27/06, 7/18/08</u>                                          | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of claims 1, 2 and 7-14 in the reply filed on 9/26/08 is acknowledged.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 7, 9, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braun (2004/0144367) in view of Alder (2004/0107943).

With respect to Claim 1, Braun teaches a delivery pipe (Figure 10) comprising: an outer pipe (134); an inner pipe (110); wherein the outer pipe (134) is connected to a plurality of fuel injectors (136a-d) of a multi-cylinder internal combustion engine (Page 2, [0027]), the inner pipe (110) being disposed in the outer pipe (134) and having an open end (117) through which an interior of the inner pipe (110) communicates with atmosphere (Page 2, [0024]-[0025]). Braun fails to teach a noise emission decreasing device being adapted to act so as to decrease a noise emitted from the inner pipe. Alder teaches an inner dampening pipe (16) of a delivery pipe having a noise emission decreasing (Page 2, [0017] – bottom of paragraph) device being adapted to act so as to decrease a noise emitted from the inner pipe (16). The Examiner notes that that the

Art Unit: 2837

foam materials of taught by Alder are known sound absorbers, and that appears to be their intended function, as [0002] states that the pressure pulses which are being dampened also comprise an undesirable noise component, which is obviously being dampened as well. Additionally, it has been held that the recitation than an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Braun, with the apparatus of Alder to increase the dampening effect of the inner pipe, as well as providing a specific desired dampening characteristic (based on the material chosen for within inner pipe #16 (Alder, Page 2, [0017])).

With respect to Claim 7, Alder teaches wherein the noise emission decreasing device (Page 2, [0017]) is provided at all portions of a cross section of an interior (18) of the inner pipe (16). Note that Page 2, [0017] states that the hollow body #18 can be **filled** with a solid.

With respect to Claim 9, Alder teaches wherein the noise emission decreasing device (Page 2, [0017]) is disposed at an entire circumference of an inside surface (18) of the inner pipe (16). Note that Page 2, [0017] states that the hollow body #18 can be **filled** with a solid.

With respect to Claim 13, Alder teaches wherein the noise emission decreasing device (Page 2, [0017]) is pressed into the inner pipe (16) and is located inside (18) the inner pipe (16). Further, with respect to pressing the material inside the inner pipe, the

Art Unit: 2837

method of forming a device is not germane to the issue of patentability of the device itself. Therefore, this limitation has been given little patentable weight.

With respect to Claim 14, Alder teaches wherein the noise emission decreasing device (Page 2, [0017]) is bonded to an inner surface of the inner pipe (16) and is located inside (18) the inner pipe (16). Further, with respect to pressing the material inside the inner pipe, the method of forming a device is not germane to the issue of patentability of the device itself. Therefore, this limitation has been given little patentable weight.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Braun (2004/0144367) in view of Alder (2004/0107943), as applied to claim 1 above, and further in view of Kraai (5,365,025). Braun and Alder are relied upon for the reasons and disclosures set forth above. Alder further teaches a noise emission decreasing device (Page 2, [0017]). Braun and Alder fail to teach wherein the noise emission decreasing device includes a mesh. Kraai teaches wherein a known noise emission decreasing device (Figures 1, 2, and 5-7, #34) includes a mesh (Col 3, Lines 22-27). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Braun, with the apparatus of Kraai to provide simple substitution of one known noise emission decreasing element (wire mesh #34 of Kraai) for another (open or closed-cell foam of Alder), to provide the predictable result of the material function as a noise emission decreasing device. *KSR International Co. v. Teleflex Inc.*, 82 USPQ 2d 1385 (2007).

Art Unit: 2837

4. Claims 8 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braun (2004/0144367) in view of Alder (2004/0107943), as applied to claim 1 above, and further in view of Langer (5,452,577). Braun and Alder are relied upon for the reasons and disclosures set forth above. Alder further teaches a noise emission decreasing device (Page 2, [0017]) located within the inner pipe (Figure 1, #16). Braun and Alder fail to explicitly teach wherein the noise emission decreasing device is provided at only a portion of a cross section of an interior of the inner pipe; wherein the noise emission decreasing device is disposed at only a portion of a circumference of an inside surface of the inner pipe; wherein the noise emission decreasing device is disposed at only the open end of the inner pipe; and wherein the noise emission decreasing device is disposed at only a longitudinally intermediate portion of the inner pipe. Langer teaches wherein it is known to provide sound absorbing material at either all or only portions of an inner pipe (Col 1, Lines 44-64) to achieve a desired reduction of noise in a conduit. Therefor when used in combination Langer teaches wherein it would have been an obvious matter of design choice to provide the noise emission decreasing device at only a portion of a cross section of an interior of the inner pipe; at only a portion of a circumference of an inside surface of the inner pipe; at only the open end of the inner pipe; and at only a longitudinally intermediate portion of the inner pipe. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Braun, with the apparatus of Langer to apply the silencing layer to locations which are particularly critical with respect to vibration so that an optimum system can be achieved with respect to noise emission. Further, it is noted

Art Unit: 2837

that Alder teaches the noise emission decreasing device filling the inner pipe #16 (Page 2, [0017]), but Alder does not teach the noise emission decreasing device at only the portions of claims 8 and 10-11. However, these limitations would have further been an obvious modification to one of ordinary skill in the art, since it has been held that omission of an element (i.e. portions of the noise emission decreasing device) and its function in a combination where the remaining elements perform the same function as before involves only routine skill in the art. In re Karlson, 136 USPQ 184.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pertinent arts of record relating to delivery pipes are disclosed in the PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy Luks whose telephone number is (571) 272-2707. The examiner can normally be reached on Monday-Thursday 8:30-6:00, and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on (571) 272-2227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2837

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeremy Luks/  
Examiner, Art Unit 2837

/Walter Benson/  
Supervisory Patent Examiner, Art Unit 2837